

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-8, 10, 12 and 14-20 are pending, Claims 1, 10, 12 and 15 having been amended, and Claims 9, 11 and 13 having been canceled by way of the present amendment.

In the outstanding Office Action Claims 1-6 and 8-16 were rejected as being unpatentable over Kojima (U.S. Patent No. 6,625,442) in view of Rune (U.S. Patent No. 6,434,396); Claims 17, 18 and 19 were rejected as being unpatentable over Kojima in view of Maher (U.S. Patent No. 6,298,058); Claim 8 was rejected as being unpatentable over Kojima and Rune in further view of Sydon et al. (U.S. Patent No. 6,480,721, hereinafter Sydon); and Claim 20 was indicated as being allowed.

Applicants appreciatively acknowledge the identification of allowable subject matter.

In reply, Claim 1 has been amended to further clarify the invention and to further describe its unique features. Amended Claim 1 is directed to a wireless base station that is connected to a plurality of wireless terminals and provides a multicasting service for the wireless terminals. The wireless base station includes a message processing unit that is configured to extract a multicast-related control data from a second message received by the wireless base station's receiver unit. A determination unit then determines whether the wireless base station provides the multicast service based on the multicast-related control data extracted by the message processing unit. A message generating unit then generates a first message that is indicative of a determination result by the determination unit, so the wireless base station can transmit this first message. The wireless base station determines autonomously whether the wireless base station provides the multicasting service for the plurality of terminals.

Kojima is directed to mobile communication system having surface sub-areas that are independently assigned special services. As recognized by the outstanding Office Action, Kojima is not directed to a multicasting service nor is it able to determine autonomously whether the wireless base station provides a multicasting service for the plurality of wireless terminals. Rather, Kojima is directed to a cellular communication system which assigns service areas to base stations for a communication service between mobile stations.

In order to cure the deficiencies with regard to Kojima, the outstanding Office Action asserts Rune for its disclosure of providing a multicasting service for a plurality of wireless terminals. Rune is directed to a method in a cellular radio communication system. In particular, Rune is directed to avoiding long set-up delays in a cellular radio communication system, especially when servicing bursty traffic. The outstanding Office Action points to column 9, lines 3-6 in Rune for its disclosure of a multicast connection between a central node and the base station which service the cells in either a semi-permanent fashion or set-up on demand from the central node.

Comparing amended Claim 1 to Kojima and Rune, amended Claim 1 requires a feature of determining “whether the wireless base station provides the multicast service, based on the multicast-related control data extracted from the message processing unit”. This feature is absent in either of Kojima and Rune. An advantage of this aspect of the presently claimed invention, is that it makes it possible to efficiently use the radio resources in the wireless communication network and reduce maintenance and operation costs. Such advantage would not be possible via any combination of Rune or Kojima as neither of these references teach or suggest this “determining” feature. As any combination of Kojima and Rune fail to teach or disclose all of the features of amended Claim 1, it is respectfully submitted that amended Claim 1 patentably defines over the combination of Kojima in view of Rune.

Similarly, Claim 10, which contains a similar feature to Claim 1, is also believed to patentably define over Kojima in view of Rune. Consequently, it is respectfully submitted that Claims 2-8 and 10 patentably define over the combination of Kojima in view of Rune.

Claim 12 includes a features of “detecting whether the wireless terminal can receive same multicast information from a plurality of wireless base station” and “determining a number of wireless terminals to which the same multicast information is being transmitted by each of the plurality of wireless base stations”. Furthermore, Claim 12 includes a feature of selecting one of the plurality of wireless base stations based on the number of wireless terminals determined in the determining step so as to make a number of the wireless base stations that transmit the same multicasting information as small as possible. An advantage with these features in amended Claim 12, is that they make it possible to reduce the number of wireless base stations that send identical multicasting information to the wireless terminals and increase efficiency of utilization of the radio resources. As neither Kojima nor Rune teach or disclose the “detecting”, “determining”, and “selecting”, steps of amended Claim 12, it is respectfully submitted that amended Claim 12 patentably defines over Kojima in view of Rune. As Claims 14 and 15 depend from amended Claim 12 it is respectfully submitted that these claims also patentably define over Kojima in view of Rune.

Claim 16 is rejected to wireless base station which provides a multicasting service for a wireless terminal. This claim requires that the wireless terminal select one of a plurality of wireless base stations so as to make the number of wireless base stations that send identical multicasting information as small as possible. In this claim, the wireless base station determines that the wireless base station provides a multicasting service for the wireless

identical multicasting information as small as possible. Thus it is respectfully submitted that Claim 16 patentably defines over Kojima in view of Rune.

Claim 17 is directed to a wireless base station that provides a multicasting service for a wireless terminal. Among other things, the wireless base station includes a counter in which a count value is incremented when a "join" message from the wireless terminal is received at the wireless base station. This counter is decremented when a leave message from the wireless terminal is received at the wireless base station wherein the wireless base station transmits the count value of the counter to the wireless terminal.

As previously recognized, Kojima does not teach a multicast system and so Maher is asserted for its disclosure of a multicast system. Maher's description of a multicast system includes group management that shares multicast group addresses (e.g., "first address") so as to create a network of terminals that may share information in respective groups (column 8, lines 47-62). Different terminals may join or leave a group (column 9, generally).

It is not clear what aspect of Maher the outstanding Office Action is asserting regarding a counter in a wireless base station in which a count value is incremented when a join message is received and decremented when a leave message is received, but it is not believed to be present. As neither Kojima nor Maher teach or suggest all of the features of Claim 17, it is respectfully submitted that Claim 17 patentably defines over Kojima in view of Maher. Because Claims 18 and 19 depend from Claim 17 it is respectfully submitted that these claims also patentably define over the asserted prior art.

Regarding the rejection of Claim 8, the basis of the rejection is that Kojima and Rune teach all the features of Claim 1, but do not teach a base station and hop number, and so Sydon is asserted for this feature. However, it is respectfully submitted that Sydon does not disclose the claimed features that are also absent in Kojima and Rune with regard to amended

Claim 1 and therefore it is respectfully submitted that Claim 8 also patentably defines over the asserted prior art.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that Claims 1-8, 10, 12 and 14-20, as amended patentably defines over the asserted prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Customer Number

22850

BDL:sjh

I:\ATTY\BDL\214581US-AM.DOC